ABSTRACT

An improved image retrieval process based on relevance feedback uses a hierarchical (per-feature) approach in comparing images. Multiple query vectors are generated for an initial image by extracting multiple low-level features from the initial image. When determining how closely a particular image in an image collection matches the initial image, a distance is calculated between the query vectors and corresponding low-level feature vectors extracted from the particular image. Once these individual distances are calculated, they are combined to generate an overall distance that represents how closely the two images match. According to other aspects, relevancy feedback received regarding previously retrieved images is used during the query vector generation and the distance determination to influence which images are subsequently retrieved.